To: Heather.Ptak@shell.com[Heather.Ptak@shell.com]; Lana.Davis@shell.com[Lana.Davis@shell.com]
Cc: Seyfried, Erin[Seyfried.Erin@epa.gov]; Shaw, Hanh[Shaw.Hanh@epa.gov]; Latier, Andrea[Latier.Andrea@epa.gov]
From: Mayers, Timothy
Sent: Wed 9/4/2013 12:40:49 AM
Subject: RE:

Thank you Heather; I appreciate your fast reply with this.

Tim Mayers

US EPA- Region 10

Oil & Gas Sector- Alaska Operations Office

222 W 7th Ave. #19, Room 537

Anchorage, AK 99501

(907) 271-3410

From: Heather.Ptak@shell.com [mailto:Heather.Ptak@shell.com]
Sent: Tuesday, September 03, 2013 4:21 PM
To: Mayers, Timothy; Lana.Davis@shell.com
Cc: Seyfried, Erin; Shaw, Hanh; Latier, Andrea
Subject: RE:

Tim,

The products listed for exploration are much more abundant than what would be used for geotech drilling. We generally described the anticipated drilling fluids in the AOGA response. I have pasted below for ease of use. Let me know if you need additional information.

Thanks Tim,

Heather

From AOGA response"If drilling fluids are used, (a) what types of fluids will be used and (b – d) what would be the anticipated chemical makeup? Under normal riserless drilling operations, seawater will be the primary drilling fluid. However, it is likely that some boreholes will require drilling mud to more effectively displace cuttings. Hole sweeps (removal of cuttings) will use a salt water gel (Attapulgite, Sepiolite, or polymers) without other chemicals. Shell plans to drill the deep boreholes using seawater, viscosifier, and barite. The gel is expected to be attapulgite clay (see previous application for additional details regarding the makeup of the drilling fluids). Attapulgite is a naturally occurring, hydrated magnesium aluminum silicate clay minerals (ISO 1998; Murray 2002). Attapulgite is listed under the OSPAR List of Substances/ Preparations Used and Discharged Offshore which Are Considered to Pose Little or No Risk to the Environment (PLONOR; OSPAR 2008). Drilling will result in drill cuttings deposited on the sea floor surrounding the borehole. Drill cuttings consist of the fragments of substrate removed during the drilling of the seabed. The layer of drill cuttings on the seabed is typically thickest around the borehole (typically in a cone shape), decreasing with distance from the borehole. The extent of cuttings dispersion is affected by the water dynamics (e.g., currents, tides). It is possible barite will be used to provide hole stability. "

From: Mayers, Timothy [mailto:Mayers.Timothy@epa.gov]
Sent: Tuesday, September 03, 2013 3:20 PM
To: Ptak, Heather A SEPCO-UAA/A/SR
Cc: Seyfried, Erin; Shaw, Hanh; Latier, Andrea
Subject:

Hi Heather-

I hope this finds you doing well.

Attached is the Table of Drilling Fluid System you provided last fall during the ODCE development. Would this table be representative of the drilling fluid Shell expects to use for geotechnical work?

Thank you

Tim Mayers

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